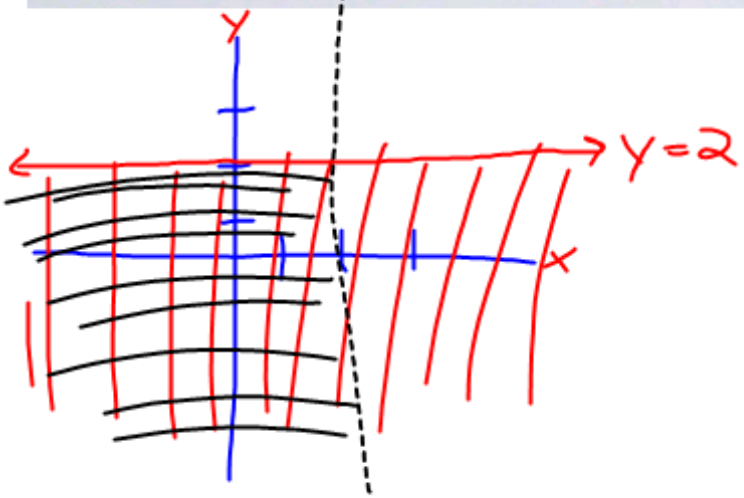
4. Sketch a graph showing the solution to each system.

a. $y \leq 2$

$x < 2$

$x<2$



b. $x + y \leq 4$

$x - y \leq 4$

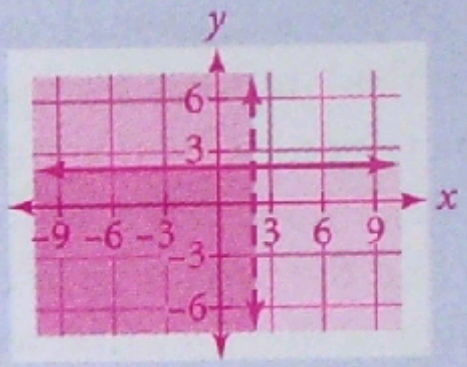
$y \leq 4-x$

$-y \leq 4-x$

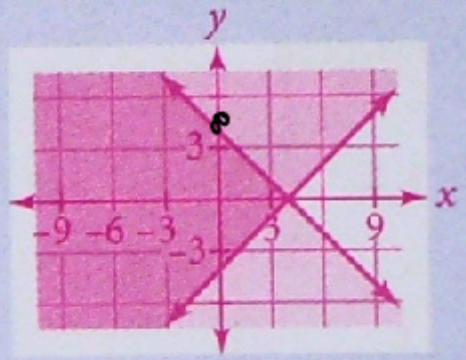
$\frac{}{-1} \quad \frac{}{-1}$

$y \geq -4 + x$

4a.

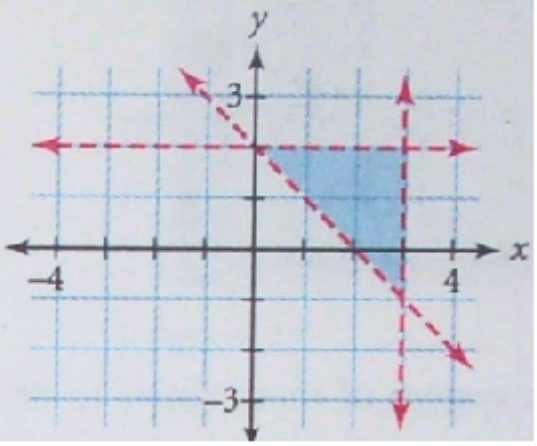


4b.



5. Write a system of inequalities for the solution shown on the graph.

$$\begin{cases} y > 2 - x \\ y < 2 \\ x < 3 \end{cases}$$



Reason and Apply

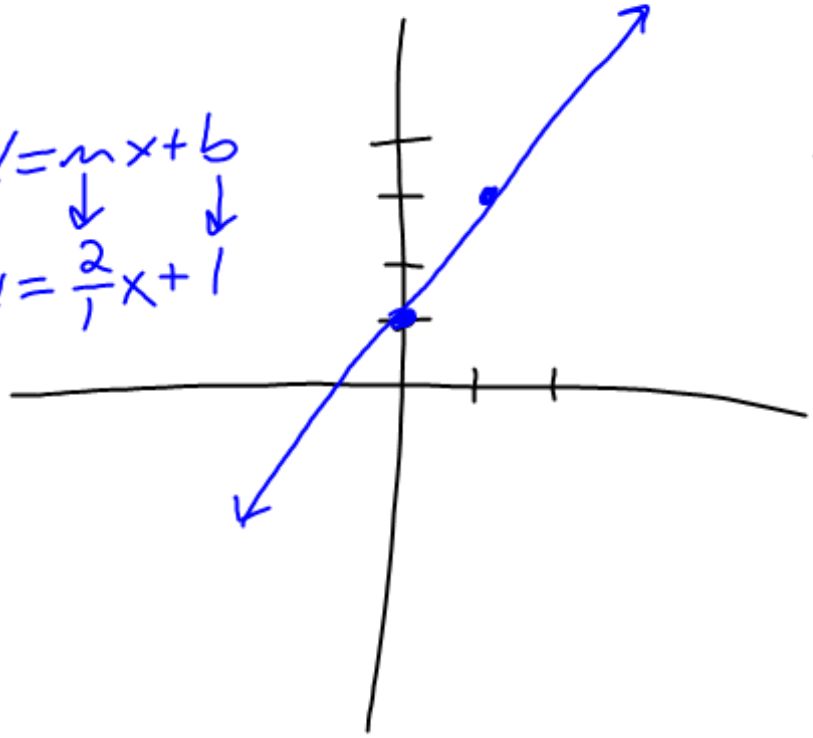
Ch. 6 review, p. 362

① Graphing linear Eq.

#1-8

$y = mx + b$

$y = \frac{2}{1}x + 1$



$y = mx + b$

- m → Slope = $\frac{\text{rise}}{\text{run}}$
- b → y-int = where it hits y-axis

② Solve inequality in one variable

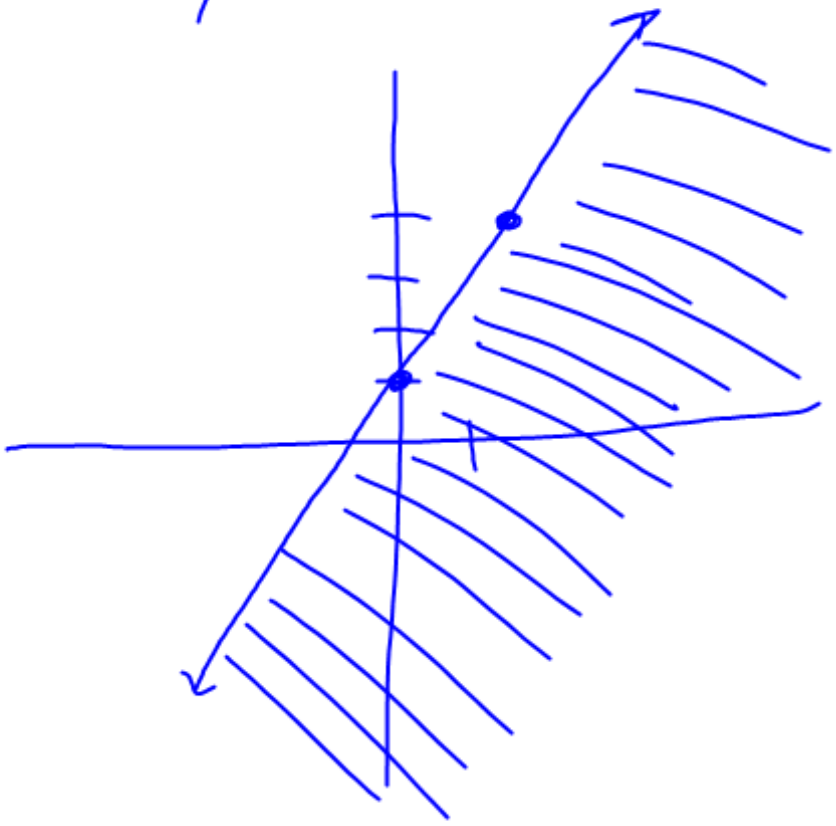
$$3x + 7 < 17$$
$$-7 \quad -7$$

$$\frac{3x}{3} < \frac{10}{3}$$

$$x < 3.\overline{33}$$

③ Graph inequalities in 2-variables

$y \leq 3x + 1$



④ Solve for y

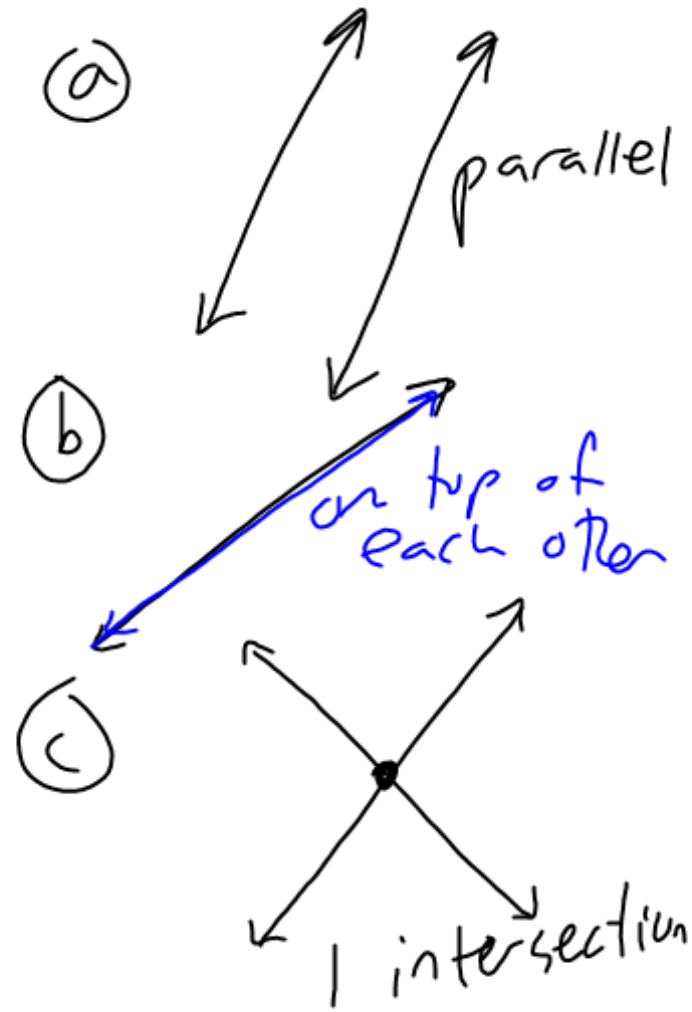
$$3x + 2y = 8$$

$-3x \qquad -3x$

$$\frac{2y}{2} = \frac{8-3x}{2}$$

$$\boxed{y = 4 - \tfrac{3}{2}x}$$

Problem #5 p.362



HW #1-8

in Section review p. 362